

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

IN THE MATTER OF APPROVING A NEW)
 CONTAMINANT SOURCE FOR) **Approval Order No. Preliminary Determination**
SCHWEITZER ENGINEERING LABS, INC.)
 PULLMAN, WA CAMPUS)

To: Kristin Irish, Environmental Health and Safety Manager
 Schweitzer Engineering Labs, Inc.
 2350 NE Hopkins Court
 Pullman, Washington 99163

The Electronics Manufacturing Facility contains the following equipment:

Type	Model	Rating	Location	Item
Diesel Generator	Generac SD180	180kW	N of Bldg 2270	#1
	Generac SD180	180kW	E of Bldg 2350	#2
	Generac SD180	180kW	N of Bldg 2535	#3
	Generac SD180	180kW	N of Bldg 2390	#4
	Generac SD180	180kW	NE of Bldg 2440	#5
	Generac SD500	500kW	NE of Bldg 2440	#6
	Caterpillar C18	600kW	Near Bldg 2420	#7
	Caterpillar C18	600kW	Near Bldg One	#8
	Caterpillar C7.1	125kW	Near Bldg 1825	#9
	Caterpillar C18	600kW	Near Bldg 1800	#10
	Caterpillar C18	600kW	Near Bldg 3 portion of 2440	#11
	Caterpillar C18	600kW	2454 Andrus Drive	#12
	Caterpillar C9	300kW	1830 Schweitzer Dr., Zochall 2	#13
Gas-fired Generator	Generac SG015	15kW	Near Bldg 1800 when operating, 2450 when stored	n/a
Natural Gas Evaporators	Water Eater Model 375G, 40 Gal/hr max evap rate, Blue Angel Plus HSG400 Burner	0.4 MMBtu/hr	2440 Building 2	n/a
	Water Eater Model 375G, 40 Gal/hr max evap rate, Blue Angel Plus HSG400 Burner	0.4 MMBtu/hr	2440 Building 2	n/a
	Water Eater Model 240G, 22 Gal/hr max evap rate, Blue Angel Plus HSG400 Burner	0.34 MMBtu/hr	2440 Building 2	n/a

Type	Model	Location
Solder Machine	6 – Speedline Vectra Elite	2440 Building 2
	2 – Speedline Electra EC-4	2440 Building 2
	1 – VaporTech, Model RD3-0723	2440 Building 2
Paint Booth	Stnd Tools and Equip Co. MCB-1000	2440 Building 2
Booth Filters	Viskon-Aire* 107X (99.54% Eff.)	2440 Building 2
Misc. Equipment	3 – Nortec Model GSTC-200 Gas Fired Humidifier	2440 (Rooftop)
	6 – Sealed Air “SpeedyPacker” Packager	2440 Bldg 3-4, 2454 – 2
	Kolb Model PSB700-V90 Stencil Wash	2440 Building 1
	4 – Speedline Aquastorm 50 – Board Washer	2440 Building 2
	4 – Specialty Coating Systems Precision Coat V – Conformal Coating Line	2440 Building 2
	6 – BTU International – Pramax X5 150N Reflow Oven	2440 Building 1

DETERMINATIONS

In relation to the above equipment and the evaluation outlined in the Technical Support Document associated with this Order, the Department of Ecology, State of Washington, pursuant to RCW 70.94.152, WAC 173-400-110, and WAC 173-460-040, makes the following determinations:

- The proposed facility, if operated as herein required, will be in accordance with applicable rules and regulations, as set forth in Chapter 173-400 WAC and 173-460 WAC and the operation thereof, at the location proposed, will not result in ambient air quality standards being exceeded.
- The proposed facility, if operated as herein required, will provide all known, available, and reasonable methods of emission control.

THEREFORE, IT IS ORDERED that the project as described in the Notice of Construction application and more specifically detailed in plans, specifications, and other information submitted to Ecology is approved for construction and operation, provided the following conditions are satisfied:

APPROVAL CONDITIONS:

- 1) **ADMINISTRATIVE CONDITION:** All previous and current Approval Orders issued to this facility are rescinded and replaced by this Approval Order No. – Preliminary Determination.
- 2) **FACILITY WIDE**
 - a) Emergency Engine-Generators (3-600kW, 1-500 kW, 5-180kW, 1-125 kW, 1-15kW)
 - i) The diesel engine-generators shall each be equipped with a properly operated and maintained non-resettable hour meter.
 - ii) Each of the Generac diesel engine-generators shall be operated no more than 45 hours for maintenance or reliability testing in any consecutive 12-month period.
 - iii) The Generac gas-fired engine-generator shall be operated no more than 15 hours for maintenance or reliability testing in any consecutive 12-month period.
 - iv) The Generac gas-fired engine-generator shall only use pipeline quality natural gas.
 - v) The maximum annual natural gas usage for the Generac gas-fired engine-generator shall be limited to 1.66 MMscf per year.
 - vi) The Caterpillar diesel engine-generators (Item Numbers 7 – 13, SEE TABLE BELOW) shall be operated for no more than 6 hours (per generator) at 10% load for non-emergency use in any consecutive 12-month period, and 72 hours (per generator) for emergency operation and annual load testing at “SEE TABLE BELOW” in any consecutive 12-month period.

Item #	Model	Rating	Location	Emergency Load
7	Caterpillar C18	600kW	Near Bldg 2420	73%
8	Caterpillar C18	600kW	Near Bldg One	100%
9	Caterpillar C7.1	125kW	Near Bldg 1825	86%
10	Caterpillar C18	600kW	Near Bldg 1800	75%
11	Caterpillar C18	600kW	Near Bldg 3 portion of 2440	100%
12	Caterpillar C18	600kW	2454 Andrus Drive	100%
13	Caterpillar C9	300kW	Zochall 2 Bldg	100%

- vii) There shall be no operation of diesel engine-generators to produce power for demand-response arrangements, peak shaving arrangements, nor to provide power as part of a financial arrangement with another entity, or to supply power to the grid.

- viii) Replacement of these engines, if necessary, shall be with emergency engines with EPA-approved emission levels for the date of installation of the replacement engine (the EPA Tiered Emission Levels for the date of installation).
- ix) The diesel engine-generators shall be fueled with diesel fuel equivalent to on-road specification No. 2 distillate fuel oil (less than 0.00150 weight percent sulfur).
- b) Evaporators (2-Water Eater Model 375G, 1-Water Eater Model 240G):
 - i) The board wash cleaning agent shall be Vigon A 201 exclusively. Use of another wash solution cleaning agent must be requested in writing to Ecology and may require revision of this approval.
 - ii) Fuel consumed by each of the 3 evaporators shall not exceed 35,048 therms in any 12 consecutive month period.
- c) Paint Booth(1-MCB-1000 Paint Booth)
 - i) The paint booth filters shall be Viskon-Aire* 107X rated for 99.54% Mass Particulate Removal Efficiency or equivalent.
 - ii) The total weight of aerosol can paint application shall not exceed 71 pounds (95-12 ounce containers) in any consecutive 12 month period.
 - iii) The total volume of liquid coatings applied shall not exceed 1.64 gallons (210 fluid ounces) in any consecutive 12 month period.
- d) Wave Solder Operations (six-Speedline VectraElite Model, two-Speedline Electra EC-4 Model)
 - i) The fume exhaust filters from the wave solder machines shall be the MERV-15 rated for a 75-85% and 90-95% Mass Particulate Removal Efficiency or equivalent for 0.3-1.0 micron and 1.0-10 micron particles respectively.

3) MONITORING REQUIREMENTS

- a) The hours each engine is operated and the reason for that operation shall be monitored for each diesel and natural-gas fired engine-generator.
- b) Deliveries of diesel fuel for the engine generators shall be monitored for sulfur content and quantity.
- c) The fuel consumed by the evaporators shall be monitored.
- d) The weight of aerosol coatings applied in the paint booth shall be monitored.
- e) The volume of liquid coatings applied in the paint booth shall be monitored.

4) OPERATION AND MAINTENANCE MANUALS

A site-specific O&M manual for all equipment that has a potential to effect emissions to the atmosphere at the facility shall be developed and followed. The manual shall be made available to Ecology representatives on request and shall be prepared within 60 days of the signed date below on this approval order.

The manual shall be reviewed no less frequently than annually, and updated as necessary. Manufacturers' operating instructions and design specifications for the above listed equipment shall be included in the manual.

The O&M manual shall be updated to reflect any modifications of the equipment or operating or maintenance or monitoring procedures. Emissions that result from failure to follow the operating procedures contained in the O&M manual or manufacturer's operating instructions may be considered proof that the equipment was not properly installed, operated, and/or maintained. The O&M manual shall at a minimum include:

- a. Normal equipment operating parameters and design specifications;

- b. Maintenance schedules;
- c. Recordkeeping and reporting requirements;
- d. Actions to be taken in the event of upset or abnormal operating conditions;
- e. Monitoring procedures and schedules.

5) **RECORDKEEPING**

Specific records shall be kept by the permittee and made available for inspection by Ecology upon request. The records shall be organized in a readily accessible manner and cover a minimum of the most recent 60-month period. Records kept shall include monthly and annual operating records of the following:

- a) Records shall be maintained of all diesel and natural-gas engine data including dates when each engine is operated, the reason for that operation, the dates that the diesel fuel is delivered to the facility, and the sulfur content of both the diesel and natural-gas fuel.
- b) A continuous record of the quantity of natural gas consumed shall be maintained.
- c) Records shall be maintained of the date paint booth filters are replaced and the manufacturer's certification of particulate mass removal efficiency for the replacement filters.
- d) The weight of aerosol coatings applied in the paint booth shall be recorded no less than weekly.
- e) The volume of liquid coatings applied in the paint booth shall be recorded no less than weekly.

6) **REPORTING**

Ecology may periodically request annual production and other information for the Registration Program. All requested information must be submitted to Ecology within 30 days following the end of the calendar year pursuant to WAC 173-400-101(2) unless otherwise specified. The report must include the following information:

- a) Air contaminant emissions, annual paint booth aerosol and liquid coating consumption, annual total hours of operation and reason for the operation for each engine-generator.

7) **SUBMITTALS**

All reports and other requested information shall be sent to Ecology's Eastern Regional Office at the address given below:

Washington State Department of Ecology
Regional Air Quality Section
4601 N. Monroe, Suite 202
Spokane, WA 99205-1295

Annual reports may also be submitted electronically to: emissions.inventory@ecy.wa.gov

8) **GENERAL CONDITIONS**

- a) **Visible Emissions** - No visible emissions shall be allowed beyond the property line, as determined by opacity readings.
- b) **Commencing/Discontinuing Construction and/or Operations** - This Approval Order shall become invalid if construction of the equipment described in the NOC application is not commenced within 18 months after receipt of the Approval Order. If construction or operation of a portion or all of the equipment described in the NOC application is discontinued for a period of 18 months, the portion of the Approval Order regulating the inactive equipment shall become invalid. Ecology may extend the 18-month period upon a satisfactory showing that an extension is justified.

- c) **Compliance Assurance Access** - Access to the source by representatives of Ecology or the EPA shall be permitted upon request. Failure to allow such access is grounds for enforcement action under the federal Clean Air Act or the Washington State Clean Air Act, and may result in revocation of this Approval Order.
- d) **Availability of Order and O&M Manual** - Legible copies of this Order and the O&M manual shall be available to employees in direct operation of the facility equipment, and be available for review upon request by Ecology.
- e) **Modifications** - Any modification to the project, contrary to information in the NOC application, shall be reported to Ecology at least 60 days before such modification. Such modification may require a new or amended NOC Approval Order.
- f) **Equipment Operation** - Operation of the facility equipment shall be conducted in compliance with all data and specifications submitted as part of the NOC application and in accordance with the O&M manual, unless otherwise approved in writing by Ecology.
- g) **Activities Inconsistent with this Approval Order** - Any activity undertaken by the permittee or others, in a manner that is inconsistent with the NOC application and this determination, shall be subject to Ecology enforcement under applicable regulations.
- h) **Obligations under Other Laws or Regulations** - Nothing in this Approval Order shall be construed to relieve the permittee of its obligations under any local, state or federal laws or regulations.

All plans, specifications, and other information submitted to the Department of Ecology relative to this project and further documents and any authorizations or approvals or denials in relation thereto shall be kept at the Eastern Regional Office of the Department of Ecology in the "Air Quality Controlled Sources" files, and by such action shall be incorporated herein and made a part thereof.

Nothing in this approval shall be construed as obviating compliance with any requirement of law other than those imposed pursuant to the Washington Clean Air Act and rules and regulations thereunder.

A six-month testing and break-in period is allowed, after any part or portion of this project becomes operational, to make any changes or adjustments required to comply with applicable rules and regulations pertaining to air quality and conditions of operation imposed herein. Thereafter, any violation of such rules and regulations or of the terms of this approval shall be subject to the sanctions provided in Chapter 70.94RCW.

Authorization may be modified, suspended or revoked in whole or part for cause including, but not limited to the following:

- a. Violation of any terms or conditions of this authorization;
- b. Obtaining this authorization by misrepresentation or failure to disclose fully all relevant fact.

The provisions of this authorization are severable and, if any provision of this authorization, or application of any provisions of their circumstances, and the remainder of this authorization, shall not be affected thereby.

YOUR RIGHT TO APPEAL

You have a right to appeal this Approval Order to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt of this Approval Order. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. “Date of receipt” is defined in RCW 43.21B.001(2).

To appeal you must do the following within 30 days of the date of receipt of this Approval Order:

- File your appeal and a copy of this Approval Order with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.
- Serve a copy of your appeal and this Approval Order on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.

You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

ADDRESS AND LOCATION INFORMATION

Street Addresses	Mailing Addresses
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503	Department of Ecology Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608
Pollution Control Hearings Board 1111 Israel RD SW STE 301 Tumwater, WA 98501	Pollution Control Hearings Board PO Box 40903 Olympia, WA 98504-0903

For additional information visit the Environmental Hearings Office Website: <http://www.eho.wa.gov>

To find laws and agency rules visit the Washington State Legislature Website:

<http://www1.leg.wa.gov/CodeReviser>

DATED at Spokane, Washington this Xth day of Month, 2019.

REVIEWED BY:

APPROVED BY:

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